

Notice of Allowability	Application No.	Applicant(s)	
	10/029,777	LI ET AL.	
	Examiner	Art Unit	
	Mark R. Milia	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received on 6/7/06.
2. ☒ The allowed claim(s) is/are 1-5, 7-12, 14-19 and 21-23.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

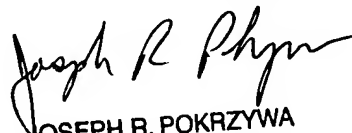
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JOSEPH R. POKRZYWA
PRIMARY EXAMINER

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 6/7/06 and has been entered and made of record. Currently, claims 1-5, 7-12, 14-19, and 21-23 are pending.

Claim Objections

2. The current amendment to claims 2, 9, and 16 to insert a period has overcome the objection as cited in the previous Office Action. Therefore the objection has been withdrawn.

Response to Arguments

3. Applicant's arguments, see page 12, filed 6/7/06, with respect to claims 1-5, 7-12, 14-19, and 21-23 have been fully considered and are persuasive. The rejection of claims 1-5, 7-12, 14-19, and 21-23 has been withdrawn. Particularly, the incorporation of all the limitations of claims 6, 13, and 20 into their respective base claims 1, 8, and 15 and the cancellation of claims 6, 13, and 20 has rendered the claims allowable over the prior art.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Rosalio Haro on 8/14/06.

The application has been amended as follows:

Regarding claim 15, in the preamble, the phrase "machine readable medium embodying instructions" has been replaced with "computer readable medium embodying computer executable instructions".

Regarding claims 16-19 and 23, in the preamble, the term "machine" has been replaced with "computer".

Allowable Subject Matter

5. Claims 1-5, 7-12, 14-19, and 21-23 allowed.

6. The following is an examiner's statement of reasons for allowance:

The examiner believes that it would not have been obvious to one of ordinary skill in the art at the time the invention was made to combine the defining of a maximum image area corresponding to a predetermined amount of memory capacity and if a

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target image is greater than the maximum image area, repeatedly dividing the target image into sub-images based on the height and width of the image until the sub-image is small enough to fit into the image area of the memory, with the other limitations recited in claims 1, 8, and 15.

The closest prior art, previously noted as Yamaguchi et al. (US 6330374), discloses processing images utilizing smaller blocks of the image, the blocks being an integral multiple of the size of a memory buffer. Yamaguchi further discloses using the smaller blocks of the image, image processing may begin before the entire image is scanned or loaded into the memory or buffer, allowing the printing to begin as soon as a row of image blocks is completed instead of waiting for the generation of the entire image. However, Yamaguchi fails to disclose defining of a maximum image area corresponding to a predetermined amount of memory capacity and if a target image is greater than the maximum image area, repeatedly dividing the target image into sub-images based on the height and width of the image until the sub-image is small enough to fit into the image area of the memory.

Therefore, for the reasons stated above, claims 1-5, 7-12, 14-19, and 21-23 are rendered allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2625

MRM



JOSEPH R. POKRZYWA
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